REMARKS

In view of the second paragraph on page 2 of the final Action, the specification and claims have been amended. Also, clerical errors of the specification have been amended.

On page 2 of the final Action, claims 1-6 and 15 were rejected under 35 U.S.C. 112, second paragraph, and claims 1-6 and 15 were rejected under 35 U.S.C. 102(b) as anticipated by, or under 35 U.S.C. 103(a) as obvious over Cagas et al.

In this respect, claim 15 has been cancelled, and claims 1 and 3-6 have been amended in view of the suggestion of the Examiner and the opinion of the Response to Argument in the final Action.

In amended claim 1, a composition comprises a biologically pure culture of a symbiotic filamentous fungus of the genus Neotyphodium producing one chanoclavine as one final metabolic product. Namely, the symbiotic filamentous fungus of the invention produces only one chanoclavine as the final metabolic product without producing ergovaline toxicity, different from other fungus.

As stated in paragraph 0019 of the specification and Fig. 1 showing alkaloid metabolism of symbiotic fungus, symbiotic fungus is considered to produce ergopeptines and lysergic acid as end products, which form toxic material for animal. However, in the invention, the symbiotic filamentous fungus produces one chanoclavine as the end product showing strong resistance to pest, not producing ergopeptines and lysergic acid showing ergovaline toxicity.

Table 1 of Cagas et al. shows data of alkaloid metabolism introduced into perenial ryegrass. In accession Nos. 10, 15, 18, 23, 29, 31, 42-44, 50, 60 and 61, chanoclavine is produced. However, at the same time, these materials produce ergovaline. Thus, in these materials, chanoclavine is not the one final metabolic product, as in the invention.

Table 2 of Cagas et al. shows data of alkaloid metabolism when fungus is introduced into meadow fescue, wherein chanoclavine is detected only in accession Nos. 3 and 17. However, in accession Nos. 3 and 17, ergovaline is also detected. Thus, chanoclavine is not the one final product in these materials, different from the invention.

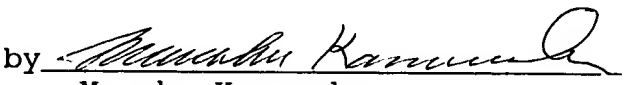
It is stated on page 368, right column, lines 15-18 of Cagas et

al. that ergovaline is responsible for fescue toxicosis in cattle. In tables 1 and 2 of Cagas et al., it is shown that ergovaline is produced together with chanoclavine. Thus, the materials or fungi as disclosed in Cagas et al. can not be used as the feeding materials for animal or cattle, as in the invention. In the invention, no toxic material is produced, so that is possible to feed the grass to cattle.

The final product of Cagas et al. is different from that of the invention and can also produce toxic material, which can not be used as in the invention. Therefore, the invention is not disclosed or suggested in Cagas et al.

Reconsideration and allowance are earnestly solicited.

Respectfully submitted,
KANESAKA AND TAKEUCHI

by 
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